AMSAT News Service Weekly Bulletins
Issue: ANS-173
Date: 1991-06-22
Sources: amsat-ans-1991-ans-173.01.txt

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|               Relayed from AMSAT BBS  NETWORK                |
|                N8EMR's Ham BBS, 614-895-2553                 |
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SB ALL @ AMSAT $ANS-173.01
AO-21 XPONDER SCHED RELEASED

HR AMSAT NEWS SERVICE BULLETIN 173.01 FROM AMSAT HQ
SILVER SPRING, MD JUNE 22, 1991
TO ALL RADIO AMATEURS BT

AMSAT-U-ORBIT Releases AO-21 Experimental Transponder Operating Schedule

AO-21 Experimental Schedule for the Next Few Weeks

Day of week	Time UTC (hh:mm)	#1 XPDR	#2 XPDR	-12dB ATTN	Lt STATUS	Timer STATUS	Comments
Monday	04:00	on	off	on	off	on	#1 Beacon Only
	12:00	on	off	off	off	on	#1 Beacon Only
	20:00	on	off	off	off	on	#1 Beacon Only
Tuesday	04:00	on	off	on	off	on	#1 Beacon Only
	12:00	on	off	off	off	on	#1 Beacon Only
	20:00	on	off	on	off	on	#1 Beacon Only
Wednesday	04:00	off	on	on	on	on	#2 Mode B On
	12:00	off	on	on	off	on	#2 Beacon Only
	20:00	off	on	off	on	on	#2 Mode B On
Thursday	04:00	off	on	off	on	off	#2 Mode B On
	12:00	off	on	off	on	on	#2 Mode B On
	20:00	off	on	on	on	on	#2 Mode B On
Friday	04:00	off	on	off	on	off	#2 Mode B On
	12:00	off	on	off	on	on	#2 Mode B On
	20:00	off	on	on	on	on	#2 Mode B On
Saturday	04:00	off	on	on	on	off	#2 Mode B On
	12:00	off	on	on	on	on	#2 Mode B On
	20:00	on	off	off	on	on	#1 Mode B On
Sunday	04:00	off	on	on	on	off	#2 Mode B On
	12:00	off	on	on	on	on	#2 Mode B On
	20:00	on	off	off	on	on	#1 Mode B On

NOTES:

Timer: When "on" the 2M downlink will be "off" every 10 minutes for 10 seconds
Lt   : Linear Transponder PASSBAND status
#1/#2: Transponder system. RUDAK-2 only linked to RX/TX of Transponder #1
-12dB: 12dB Attenuator in receiving section

Transponder #1
==============
Uplink: 435.102 -- 435.022 MHz (80 kHz bandwidth)
Downlink: 145.852 -- 145.932 MHz (inverted)
Beacon : CW Telemetry (8 parameters) @ 145.822 MHz
          digital PSK (30 parameters) @ 145.952 MHz (1100 baud scrambled)

Transponder #2

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==============
Uplink:   435.123 -- 435.043 MHz (80 kHz bandwidth)
Downlink: 145.866 -- 145.946 MHz (inverted)
Beacon  : CW Telemetry (8 parameters) @ 145.948 MHz
          digital PSK (30 parameters) @ 145.938 MHz
                                      @ 145.800 MHz (1100 baud scrambled)


[The AMSAT News Service (ANS) would like to thank AMSAT-DL and AMSAT-U-ORBITA
 for the information which went into this bulletin.]

/EX
SB ALL @ AMSAT      $ANS-173.02
WO-18 STATUS REPORT

HR AMSAT NEWS SERVICE BULLETIN 173.02 FROM AMSAT HQ
SILVER SPRING, MD JUNE 22, 1991
TO ALL RADIO AMATEURS BT

WA3PSD Provides A WEBERSAT-OSCAR-18 Status Report

There has been a bit of unexpected behavior observed on WO-18 the
last week.  If it continues so, it will be quite a timely development.
Rotation about the Z-axis has begun to accelerate.  For a period
of months, the spin rate seemed stable at about one rotation every 21 minutes.
It clearly was not.  The latest whole orbit data collection unmistakably
indicates a change to around one rotation every 10 minutes.  This casts
doubt on the accuracy of what had been evolving as the most popular theory
(assymmetry in shape and moment-of-inertia of the spacecraft) to explain
why spin slowed originally.  It's too soon to discard it, though.
But no matter.  This is good news.  ALL passes across the magnetic
equator now are yielding earth-pointing attitudes.  And, perhaps not
surprisingly, we now have aboard and in memory five separate valid (non-
dark, non-washed-out, i.e., detailed) pictures. The best I've seen so far
is picture #6, which is the usual wispy clouds (store-and-forward meteor-
ology from space with imaging equipment priced less than $10,000 IS possible).
We will try to default to it as often as possible during the next few days,
but if your QTH is within a footprint including Utah, you will also be
getting the other picturess as we download 'em to see what's in 'em.  We will
always try to reset picture #6 transmitting before the end of our passes
here.  If you are on the East coast, picture #6 will probably be what you
see.  We intend to start shooting more within a week, but we'll always
try to keep picture #6 or something interesting coming down as long as the
Single-Event-Upsets (SEU) stay out of the sync fields.

And now the really good news.  Again, if this rotation sustains
itself, it produces a substantial increase in the probabilities that we
will have a sunward pointing attitude at some point during shadowing in
the upcoming eclipse on July 11th.  I intend to contrain our shoot con-
ditions during the event to large current generation from the +Y array
and very low amounts from the other arrays.  With essentially no rotation
before, we were stuck with just hoping to be lucky enough to have +Y point-
ing properly during shadow traversal -- and shooting then.  With this new
rotation rate, there are better chances for that to happen.  I expect to use
a 9 through 3 mix of pictures that day with 9 constrained to shoot the sun
(with only 10 secs between picture constraint waits) and 3 pics constrained
to shoot the Earth with what will be lower light levels.  Picture #9 will
shoot with different camera iris values.  We certainly know more now about
the iris than we did, but we don't have much experience shooting the sun so
nine different values are probably in order.
     Enjoy.

73's,
Chris Williams (WA3PSD)
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WO-18 Operations Manager

/EX
SB ALL @ AMSAT $ANS-173.03
NEW AO-13 TRANSPONDER SCHED

HR AMSAT NEWS SERVICE BULLETIN 173.03 FROM AMSAT HQ
SILVER SPRING, MD APRIL JUNE 22, 1991
TO ALL RADIO AMATEURS BT

New AO-13 Spring Schedule, AO-10 Not Presently Available

The newly announced AO-13 transponder schedule which was expected to commence
19JUN91 and will continue thru 12AUG91 is as follows:

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 Mode-B  : MA 000 to MA 165 !        Perigee eclipses:
 Mode-JL : MA 165 to MA 190 !   Minimum 6, Typical 29, Maximum 60 minutes
 Mode-LS : MA 190 to MA 195 !        until end 1991.
 Mode-S  : MA 195 to MA 205 ! <= Mode-B transponder is OFF !!
 Mode-B  : MA 205 to MA 256 !
 Omnis   : MA 240 to MA 060 !
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Please DON'T uplink to mode-B 195-205; it interferes with Mode S

Once Magnetorquing is completed the anticipated Spacecraft attitude will be:

BLON = 210 BLAT = 0

Magnetorquing should be completed by 23JUN91.

Currently, OSCAR-10 is not receiving sufficient solar panel until further
notice. This period of dormancy is expected to end soon. As soon as OSCAR-10
can support Mode-B transponder operations it will once again be released for
general use. Early reports of OSCAR-10's beacon returning to full strength
can be sent to VK5AGR @ PACSAT-1 (aka AO-16), @ UOSAT-3 (aka UO-14), @ 8J1JBS
(aka FO-20), or @ VK5WI. 73, Graham VK5AGR

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